

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & B, RAJA S.C.MULLICK ROAD
JADAVPUR, KOLKATA -700032

TENDER NOTICE NO. DST/SR/S1/IC-61A/2012/AB/MS/13/26 dated 17.06.2013

Sealed tenders in two bids system (Technical Bid & Financial Bid) are invited from bonafide, resourceful and eligible manufacturers/exclusive distributors for "Microwave Synthesizer"

Part - I (Technical Bid) of the tender should contain technical details and commercial terms and conditions and **Part-II** (Price Bid) should indicate group-wise price as mentioned in the Technical Bid where applicable. The Technical Bid and Price bid are to be submitted in two separately sealed envelopes distinctly marked accordingly and both to be put inside another envelope, which should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Complete tender should reach the office of the Department of Materials Science, Indian Association for the Cultivation of Science, 2A & B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032 on or before scheduled date & time specified below.

Tender Notice No.	DST/SR/S1/IC-61A/2012/AB/MS/13/26 dated 17.06.2013
Last date and time of submitting tender	12 th July , 2013 at 1.00 P.M.
Pre-bid meeting	26th June, 2013 at 3.00 P.M.
Date and time of opening tender	12 th July, 2013 at 3.00 P.M.
Place of opening tender	S.N.Bose Hall, IACS, Kolkata
Contact	e-mail:msab@iacs.res.in Tel. +91-33-2473 4971 (ext. 1207)

The technical bids will be opened first to evaluate the technical specifications of the equipment

thereafter, the **Price bids** of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or expenses to any of the bidders for attending opening of technical bid.

1. TECHNICAL BID:

The Technical Bid should contain technical specifications and kept in a separate envelope duly super scribed as "**Technical Bid**" on the outer side of the envelope as detailed above.

The Technical Specifications acceptable for the
"Microwave Synthesizer"
are as follows:

Specifications for Microwave Synthesizer:

Microwave assisted synthesizer should perform synthesis reactions involving routine organic synthesis, organic-inorganic hybrids, inorganic and organic nanomaterials, catalysis using different solid materials in the presence of aqueous and organic solvents.

The System must be able to insure efficient operation for the synthesis of compounds in sealed vials of 1-10 mL in size or under atmospheric conditions in flasks of 100-125 mL size. Aluminum crimping should not be there for Sealing Reaction Vials and sealing should be done with re-usable septa.

The System must feature a power delivery system that is capable of providing continuous microwave power in programmable 1-watt increments throughout a range from 0 -300 watts.

The System must incorporate the ability to simultaneously apply microwave energy while cooling the reaction environment. This capability is needed to perform high energy, low temperature syntheses.

The System must incorporate the ability for temperature measurement and feedback control. This temperature control system must be non-invasive and have a working range of 0 to 300 °C. It must feature a sensor positioned under the cavity floor so that temperature measurement is independent of sample volume and reaction container size.

System must allow the user to change all operating parameters in the midst of the run.

The system must incorporate an *in situ* stirring system to affect the stirring of the reaction contents of both the atmospheric and sealed vials using magnetic stir bars.

The system must incorporate an automated vent and re-seal mechanism for 10 mL reaction vials. The system must integrate a relief system that specifically prevents the removal of reaction vials while under elevated pressure above 30 bar.

System must be upgradable to perform 50-80 ml pressurized reactions with facilities to add the gaseous reagents while performing the synthesis under pressurized reaction conditions.

Power supply must be 240 V, 50Hz, 15A in single phase

User List: The supplier should provide a list of current users (with contact no, Email address etc) for the quoted item in India.

Service facility: Trained technicians should install the instrument and ensure it is operating correctly and within specifications. User training at site should also be provided. Supplier should mention their details of service setup that are responsible for after sales support.

PRICE BID:

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as "**PRICE BID**" on the outer cover of the envelope as already detailed above. The price bids of only technically qualified bidders will be opened and they will be intimated the date and time of opening of price bids at their email id-(s). Rest of the bids will stand rejected.

PRICE: Price to be quoted both on FOB/CIF basis. Name of the particular port from where our authorized forwarder will lift the consignment must be mentioned clearly with FOB price.

BID SECURITY:

1. The financial bid should be super scribed as "**PRICE BID**" on the outer cover of the envelope
2. **Bid Security (EMD):** An Account Payee Demand Draft of Rs.26,000/- in the name of "**Indian Association for the Cultivation of Science**" is to be furnished by the bidders, as Bid Security money or Earnest Money Deposit (EMD).
3. The Demand Draft for the Bid-Security money should have at least 45(forty five) days validity period after the opening of the Bids.
4. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

PERFORMANCE SECURITY:

An Account Payee Demand Draft of an amount of **10% of the order value** in the name of "**Indian Association for the Cultivation of Science**" is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty

obligations. Bid security money will be refunded to successful bidder on receipt of the Performance security money.

GENERAL INSTRUCTIONS:

1. Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof. **"Microwave Synthesizer "** should clearly be written on the envelope.

2. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the Institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.

3. **Payment:** 100% against delivery and successful installation subject to submission of performance guarantee.

4. **Warranty:** Minimum 5 years.

5. **Installation/Demonstration/Application Training at site:** Free of cost by the supplier.

6. **Service facility:** Supplier should mention their details of service setup and Manpower in Kolkata who are responsible for after sales support. Response time should be within 24 hours.

7. **Validity of tender:** Tender submitted shall remain valid at least for three months from the date of opening of the tender. Validity beyond four months from the date of opening of the tender shall be by mutual consent.

8. The tender should accompany a compliance chart.

9. The rate should be inclusive of all taxes, transportation etc. Nothing extra will be paid in addition to the quoted rate.

10. The model number, make, and a printed literature of the product shall be submitted positively.

11. Proposed delivery schedule should be mentioned clearly.

12. Manufacturers/exclusive distributors/vendors should have history of supplying this type of instrument to this or other Scientific Organization.
13. Authorized Dealership Certificate is must in case of principal manufacturing company is not quoting directly.
14. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
15. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.
16. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.
17. For any clarification regarding technical specifications etc. please send your queries to "Prof. Asim Bhaumik" at msab@iacs.res.in.
18. The Institute reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Registrar